

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 9, line 1, with the following rewritten paragraph:

~~Fig. 5 illustrates~~Figs. 5A – 5D illustrate a high level flowchart demonstrating the functionality of the preferred embodiment of Fig. 2 and Fig 3;

Please replace the paragraph beginning at page 9, line 3, with the following rewritten paragraph:

~~Fig. 6 is~~Figs. 6A – 6B show a flowchart demonstrating the steps by which a purchase order may be initiated using a supplier catalog according to the preferred embodiment of Fig. 2 and Fig. 3;

Please replace the paragraph beginning at page 9, line 5, with the following rewritten paragraph:

~~Fig. 7 is~~Figs. 7A – 7B show a flowchart showing the steps by which shipment of ordered product is processed according to the preferred embodiment of Fig. 2 and Fig 3; and

Please replace the paragraph beginning at page 9, line 7, with the following rewritten paragraph:

~~Fig. 8 is~~Figs. 8A – 8D show a flowchart demonstrating the signature process for narcotic or other controlled substances orders according to the preferred embodiment of Fig. 2 and Fig 3.

Please replace the paragraph beginning at page 12, line 23, with the following rewritten paragraph:

~~Fig. 5 illustrates~~Figs. 5A – 5D illustrate a high-level flowchart demonstrating the functionality of system 25 including initiating, processing, delivering, receiving and acknowledging receipt of an order; initiating a request for a digital certificate to permit use of system 25, and supplier order catalog updating.

Please replace the paragraph beginning at page 13, line 1, with the following rewritten paragraph:

Before an order for narcotics or other controlled substance may be successfully made using system 25 by user who is a qualified person such as a pharmacist having current and appropriate credentials to deal in such goods, the qualified person must make an application to a local regulatory authority (LRA) for user approval and certificate and public/private key generation in accordance with PKI procedures commonly understood in the art. A local regulatory authority may be a body that licenses or otherwise governs the applicant user or another trusted agency that may verify the applicant's credentials such as a VAS served by the system 25. With reference to Fig. 4 and steps 200 to 208 of ~~Fig. 5~~Fig. 5A, a pharmacist desiring to take advantage of system 25 applies to LRA for permission to use system 25 and the provision of the necessary Entrust digital certificate and keys to make the pharmacist's user system 21' compliant with system 25. To approve such a request, LRA verifies the credentials in support of the application and requests a certificate from CA for approved applicants. Pharmacist initiates a certificate on user system 21' in cooperation with CA 40. Should a user's status as a qualified person change, making the user no longer qualified to deal in controlled substances, LRA may inform CA to suspend the user's certificate to prevent further ordering capabilities.

Please replace the paragraph beginning at page 13, line 16, with the following rewritten paragraph:

With reference to ~~Fig. 5~~Figs. 5A – 5D, there is shown the steps by which an exemplary user at a hospital uses system 25 for procuring goods from VAS. It is clear from Fig. 4 that only when an order includes narcotics or other controlled substances that a pharmacist need be involved in the order process. Thus, system 25 integrates ordering goods subject to a verifiable chain of custody with ordering other products. Step 100 illustrates a user choosing to place an order electronically via system 21'. At step 102, User connects to SPS 38 login web page via the Internet 32 and logs in using a predefined user identity and password. As noted previously all such HTML communications between user system 21' and SPS 38 employ SSL technology for security to create user private procurement transactions.

Please replace the paragraph beginning at page 13, line 25, with the following rewritten paragraph:

Once logged in, user creates an order, entering a purchase order number and user reference as well as line items and quantities to request at step 104. Reference may be had to ~~Fig. 6 which illustrates~~Figs. 6A – 6B which illustrate in more detail a flowchart demonstrating the steps by which a purchase order may be initiated using a supplier catalog to select items, determine availability, etc, through SPS 38 as is well understood to persons skilled in the art.

Please replace the paragraph beginning at page 14, line 1, with the following rewritten paragraph:

Once the purchase order is completed and submitted, with reference again to ~~Fig. 5~~Figs. 5A – 5D, SPS 38 determines if the order includes any narcotic or other controlled substances that are subject to ordering restrictions at step 106. For such an order, SPS 38 communicates with user pharmacist and Certificate Authority to authenticate pharmacist as entitled to order such goods. These steps are described in further detail with reference to ~~Fig. 8~~Figs. 8A – 8D below. Briefly, pharmacist is prompted at step 108 to enter a further user identity and password to activate a personal digital signature and certificate through Entrust Client 54 for transmission to CA 40. The qualified person entitled to order such goods must keep the user identity and password secret to avoid unauthorized use. If the order is validated to SPS 38 by CA 40 at step 110, SPS 38 stores the digitally signed order (step 112), and processes it for order information and formats and transmits an EDI 850 purchase order to VAS 44' (step 114).

Please replace the paragraph beginning at page 14, line 25, with the following rewritten paragraph:

With reference to ~~Fig. 7~~Figs. 7A – 7B showing a flowchart for steps to process an order shipment, following step 118 an advance shipment notice (EDI message 856) is also sent via FTP server 78 to SPS 38 advising of the shipment (steps 120 to 122). Supplier network link is preferably a VPN employing digital certificates with a certificate authority to provide private procurement transaction communications between VAS system 44' and SPS 38. SPS 38 uses the receipt of an 856 message (step 124) that indicates shipment of narcotic or other controlled

substances to begin a count down timer within which time the user must initiate a 861 message acknowledging receipt of the shipment in a manner discussed below.

Please replace the paragraph beginning at page 15, line 12, with the following rewritten paragraph:

Following the shipment of the ordered product to the user at the hospital, the hospital receives the shipment at step 128 and user logs into SPS 38. For orders including narcotic or other controlled substance product, it is necessary for the qualified person who ordered such product to timely acknowledge its receipt. Once logged into SPS 38, user selects a screen to process the receipt of an order and enters a product order reference number (steps 130-132). SPS 38 retrieves order information using the reference number from database server 64 for displaying to the user at step 134. The user compares the product received to the order (step 136) and either confirms receipt (step 138) or enters the actual quantity received to SPS 38 (step 140). User may choose to repeat the confirmation process for additional orders (step 142) or exit the confirmation process (step 144). On the SPS 38 side, the confirmed receipt information is processed in a manner similar to an original order (step 106, ~~Fig. 5~~Fig. 5C).

Please replace the paragraph beginning at page 16, line 3, with the following rewritten paragraph:

There is shown in more detail in ~~Fig. 8~~Figs. 8A – 8D a flowchart demonstrating the steps for signing orders or receipts for narcotics or other controlled substances by an exemplary user, namely a pharmacist at a hospital. The flow is described with reference to signing a 850 order but it is understood that processing a 861 confirmation receipt is comparably. At step 200, SPS 38 receives an order from user system 21' for narcotics or other controlled substances and requests CA 40 to verify SPS 38 certificate that SPS 38 will use to sign the formatted 850 order (step 202). If the certificate is not validated, the pharmacist is informed and may call for assistance (step 204). If the certificate is validated, SPS 38 signs the 850 order, encrypts it and sends it to pharmacist's web browser 52 with a web helper app 56 triggering name (e.g. MIME extension .pesx) at steps 206 to 208. Upon recognition of the MIME extension by browser 52, helper app 56 is initiated and in turn calls Entrust Client 54 (steps 210 to 212).

Please replace the paragraph beginning at page 16, line 14, with the following rewritten paragraph:

As described earlier with reference to ~~Fig. 5~~Fig. 5C at step 108, Entrust Client 54 prompts the pharmacist for a user identity and password for validation. Following successful entry of the requested information by the pharmacist (step 214), Entrust Client 54 communicates with CA 40 to validate the pharmacist's digital certificate (step 216). If the certificate is not valid, the pharmacist is informed and may call for assistance (step 218). As indicated by steps 219-222, provided the pharmacist's certificate is valid, helper app 52 calls Entrust Client 54 to sign and encrypt the .pesx file containing the 850 order for return to SPS 38. Upon receipt of the twice signed and encrypted 850 order, at steps 224-228, SPS 38 removes the outer layer of encryption with the public key retrieved from CA 40. The file is checked for SPS's signature added at step 206 to ensure there file is an original comparing the certificate stored at SPS 38 with that received. The pharmacist user may be notified of any error for the pharmacist's follow-up (steps 230 to 236). For a file having a matched certificate, SPS 38 decrypts the first encryption layer on the file to remove SPS 38 encryption performed at step 208 and stores an encrypted pharmacist digital signature file as a record of the transaction (step 238). As described earlier with reference to ~~Fig. 5~~Fig. 5C, at step 114, SPS 38 thereafter sends an appropriate 850 message to VAS system 44'.

Please replace the paragraph beginning at page 17, line 1, with the following rewritten paragraph:

All products available for order using system 25 are stored in a supplier catalog database at SPS 38 accessible via DB server 64. The database may be updated using the EDI message interface (FTP server 78) from VAS and VAS Supplier generated EDI 832 update messages. With reference to ~~Fig. 5~~Figs. 5A – 5D, there is demonstrated the steps to update the supplier catalog database. In the preferred embodiment of Fig. 2 and Fig. 3, following the internal updating of a supply catalog (whether digitally stored or not) at a supplier to VAS, at step 300, VAS supplier sends product information to VAS who in turn communicates via FTP the catalog update information in the form of an encrypted EDI 832 message to SPS 38 (step 302). SPS 38

receives the information via FTP 60, decrypts same and updates the catalog server database through DB Server 64 (steps 304 and 306).